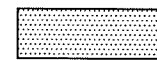


# APPLICABLE STATE STANDARD PLANS

DATED MAY 2006

ES-1A	ES-3A	ES-4A	ES-5A	ES-6A	ES-7A	ES-8
ES-1B	ES-3B	ES-4B	ES-5B	ES-6B	ES-7B	ES-10
ES-2A	ES-3C	ES-4C	ES-5C		ES-7F	ES-11
ES-2C		ES-4D	ES-5E		ES-7L	ES-13A
ES-2D		ES-4E			ES-7M	ES-13B
					ES-7N	ES-14

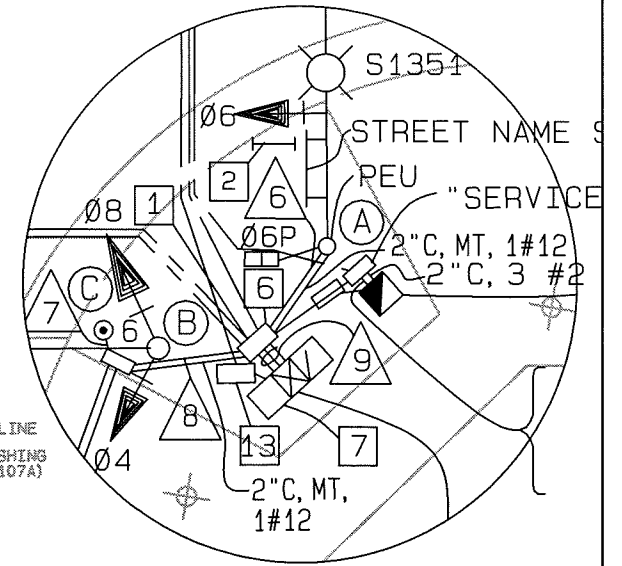
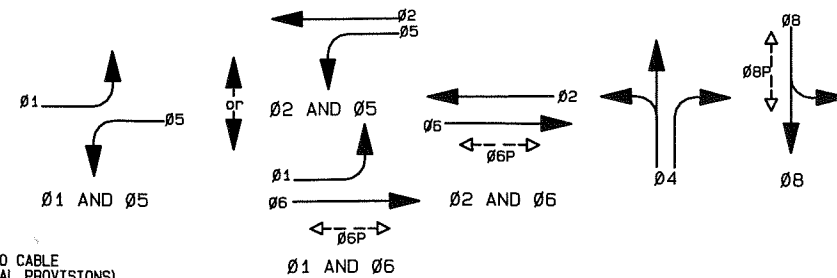
## LEGEND



GRIND ENTIRE AREA 0.2' DEEP AND REPLACE WITH ASPHALT CONCRETE. NEW LOOPS ARE TO BE INSTALLED BELOW FINAL LIFT OF NEW ASPHALT CONCRETE. SEE CIVIL DRAWINGS.

## MODEL 2070E CONTROLLER ASSEMBLY

TRAFFIC PHASE DIAGRAM



DETAIL A

## EQUIPMENT AND POLE LOCATIONS

LOCATION	STATION	OFFSET
(A)	46 + 82	47.57' (RT)
(B)	46 + 63	59.14' (RT)
(C)	46 + 59	57.74' (RT)
(D)	45 + 74	59.00' (RT)
(E)	45 + 60	50.85' (RT)
(F)	45 + 64	-31.17' (LT)
(G)	45 + 70	-41.00' (LT)
(H)	46 + 72	-39.37' (LT)
CONTROLLER CABINET (CENTER)	46 + 77	62.34' (RT)
SERVICE CABINET (CENTER)	46 + 87	52.49' (RT)

## PROJECT NOTES

- TYPE 30" X 48" CONCRETE PULL BOX WITH A TWO SECTION LID.
- TYPE I PEDESTRIAN BARRICADE. SEE DETAIL ES-7P. SIGN AND BRACKET SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.
- CONTRACTOR SHALL FURNISH AND INSTALL A (3M) OPTICOM MODEL 722 (OR MOST CURRENT) DETECTOR ON THE SIGNAL MAST ARM EXACT LOCATION SHALL BE DETERMINED BY THE ENGINEER. MAST ARM SHALL BE DRILLED OUT AND A THREADED FITTING INSTALLED.
- TYPE "C" BICYCLE DETECTOR LOOP, 36" WIDE BY 120" IN LENGTH, CENTERED IN THE BIKE LANE. SEE DETAIL ES-5B FOR WIRE WINDING DATA.
- COIL AN ADDITIONAL 75' OF VIDEO CABLE IN THE PULL BOX. SEE SPECIAL PROVISIONS FOR CABLE TYPE.
- END OF CONDUIT SHALL TERMINATE INSIDE OF THE 332 CABINET THROUGH THE CONCRETE FOUNDATION.
- PROVIDE AND INSTALL A NEW BATTERY BACK UP ASSEMBLY. SEE SPECIAL PROVISION.
- REMOVE AND SALVAGE EXISTING LUMINAIRE, LUMINAIRE ARM, AND FLASHING BEACON ASSEMBLIES. BEACON AND LUMINAIRE SHALL REMAIN OPERATIONAL UNTIL THE NEW SIGNAL SYSTEM IS OPERATIONAL. SALVAGED MATERIAL TO BE DELIVERED TO 2175 AIRPORT BLVD. WOOD POLE TO REMAIN.
- REMOVE ENTIRE EXISTING FLASHING BEACON FOUNDATION (APPROX. 9' DEEP, 36" IN DIAMETER). BACKFILL WITH 2 SACK SAND SLURRY MIXTURE.
- INSTALL A FOUR-SECTION SIGNAL HEAD WITH RED, YELLOW, GREEN BALL AND LT. GREEN ARROW INDICATIONS (LED 12")
- EXISTING PG & E POLE. INSTALL PG & E SERVICE BOX. TO BE INSTALLED PER PG & E REQUIREMENT. INSTALL 3" SERVICE RISER BETWEEN EXISTING POLE AND NEW PULL BOX. POLE QUADRANT TO BE DETERMINED.
- REPLACE "STOP AHEAD" WITH "SIGNAL AHEAD" SIGN. - SEE SIGN PLAN SHEET FOR SIGN REPLACEMENT.
- INSTALL #5 PULL BOX, LID TO READ "COMMUNICATION." INSTALL 2"C FROM PULL BOX DIRECTLY INTO CONTROLLER CABINET. COIL AN ADDITIONAL 10' OF VIDEO AND COMMUNICATION CABLE IN CONTROLLER CABINET.
- INSTALL #5 PULL BOX AND RISER, TO BE INSTALLED PER AT&T REQUIREMENTS. LID TO READ "COMMUNICATION."

## CONTRACTOR PROVIDED AND INSTALLED

TYPE III AF SERVICE EQUIPMENT ENCLOSURE No. SC135S PROVIDE EQUIPMENT ITEMS (1) THRU (8), (13), (15) THRU (17) AND (20) THRU (23), PER SERVICE WIRING DIAGRAM No. ES-2D. FRONT DOOR SHALL FACE NORTH.

## CONTRACTOR PROVIDED AND INSTALLED

SYSTEM # SC 135 MODEL 2070E CONTROLLER ASSEMBLY WITH A MODEL 332L CABINET. FRONT DOOR OF CABINET SHALL FACE EAST. DISPLAY SHALL BE LOCATED ON THE EAST SIDE OF CABINET. SEE ES-3C FOR FOUNDATION DETAILS.

## SIGNAL AND LIGHTING NOTES

- THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.
- THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION OF STANDARD FOUNDATION AND CONDUIT PLACEMENT.
- THE LOCATION OF PULL BOXES, POLE FOUNDATIONS, AND OTHER EQUIPMENT SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- ALL UNDERGROUND CONDUIT SHALL BE PLACED IN A TRENCH AND ENCASED IN CONCRETE AS DESCRIBED IN THE SPECIAL PROVISIONS. THIS INCLUDES CONDUIT PLACED IN AREAS THAT WILL BE COVERED WITH ASPHALT OR CONCRETE. ALL CONDUIT SHALL HAVE 30" OF CONCRETE CAP COVER.
- ALL EMPTY CONDUITS SHALL HAVE (1) #12 SOLID BLACK TRACE WIRE AND MULE TAPE INSTALLED. THE ENDS OF THE CONDUITS SHALL BE SEALED AS DIRECTED BY THE ENGINEER. TRACE WIRES SHALL BE CONNECTED TOGETHER USING C CLAMPS FOR CONTINUITY.
- ALL VEHICLE SIGNALS, PEDESTRIAN INDICATIONS, AND SAFETY LIGHTING SHALL BE "LED." SEE SPECIAL PROVISIONS FOR DETAILS.
- SEE CIVIL PLANS FOR LOOP GRIND OUT AREA.
- ALL 5T PULL BOXES OUTSIDE PAVED AREA SHALL HAVE A 6" WIDE FULL DEPTH CONCRETE COLLAR.
- ALL CONDUIT ENDS SHALL HAVE BELL ENDS INSTALLED PRIOR TO CONDUCTORS BEING INSTALLED.
- ALL CONDUIT FEEDING POLE F, G AND H SHALL BE PLACED UNDER EXISTING AND NEW CULVERT PIPE.
- POLARA SYSTEM, APS, EACH NAVIGATOR PUSH BUTTON ASSEMBLY SHALL HAVE A DEDICATED #14 COLOR CODED NEUTRAL FROM EACH PPB TO CONTROLLER CABINET.

## ADDENDUM NO. 1

DESIGN	BY ED OLSEN/KIM GARL
DRAWING	BY L. LEUNG/M. FAJARDO
CHECKED	BY JOHN MCCARTHY

*John R. McCarthy*  
REGISTERED TRAFFIC ENGINEER  
2/28/2016  
PLANS APPROVAL DATE



"AS BUILT" INFORMATION TO BE COMPLETED AFTER CONSTRUCTION	DATE	REVISION	BY	APPROVED
CONSTRUCTION COMPLETED:	2/2016	ADDENDUM 1		KG JRM
RESIDENT ENGINEER				
AS BUILT DRAWINGS BY:				

SIGNAL PLAN					COUNTY OF SONOMA	
ROAD NUMBER	BUDGET NUMBER	FISCAL YEAR	SHEET NUMBER	TOTAL SHEETS	DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	
5602 5707	CO2279	2015-16	22	48	SUSAN R. KLASSEN, P.E., DIRECTOR	
					PROJECT: ADOBE ROAD AT EAST WASHINGTON STREET	
					DATE: JANUARY 2016 SCALE: 1" = 20'	

R:\Current Projects\2279\_Adoe\_JL 2-Project Design\Preliminary Plans\SIGNAL--JL pro DATE: 2/23/2016 TIME: 4:52PM

CONDUCTOR AND CONDUIT SCHEDULE																										
CONDUCTOR DESIGNATION		CONDUIT RUNS																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
NO. 14 CONDUCTOR																										
	Ø1				3	3	3			6																
	Ø2	3		3	3	6				6																
	Ø3																									
	Ø4	3		3	3	6			3	9																
	Ø5	3		3		3				6	3		3													
	Ø6						3			6	3		3													
	Ø7																									
	Ø8							3	6	3	3															
	Ø2P																									
	Ø6P						2			4	2		2													
	Ø8P	2		2		2				4	2	2														
	** Ø6PPB							1	1	2	1	1														
	** Ø8PPB		1	1		1				2	1		1													
	PPB NEUTRAL		1	1		1		1	1	4	2	1	1													
	PHOTO ELECTRIC UNIT						3																			
	SPARES			3		6			3	15	6	3														
TOTAL NO. 14 CONDUCTORS		11	2	16	9	28	11	2	11	68	23	10	10													
DETECTOR CABLES																										
	111U									1	1															
	119U									1	1															
	212U					1				1																
	212L					1				1																
	213U					1				1																
	416U								1	1																
	416L								1	1																
	417L								1	1																
	417U								1	1																
	5J1U					1				1																
	5J9U					1				1																
	6J2U									1	1															
	6J2L									1	1															
	6J3L									1	1															
	6J4U									1	1															
	8J6U			1		1				1																
	8J6L			1		1				1																
	CT1					1				1																
	CT2					1				1																
	CT3								1	1																
	CT4								1	1																
	CT5								1	1																
	CT6									1	1															
	CT7									1	1															
TOTAL DETECTOR CABLES			2		9				7	24	8															
NO. 8 CONDUCTORS																										
	STREET LIGHTING (240V)	2		2	2	2	2		2		2		2													
	SIGNAL NEUTRAL (120V)	1	1	1	1	1	1	1	1	2	1	1	1													
	EQUIPMENT GROUND	1	1	1	1	1	1	1	1	2	1	1	1													
TOTAL NO. 8 CONDUCTORS		4	2	4	4	4	4	2	4	4	4	2	4													
	OPTICOM CABLE EVA	1		1		1				1																
	OPTICOM CABLE EVC						1			1																
	OPTICOM CABLE EVD				1	1				1																
CONDUIT SIZE (INCHES)		2 1/2	1 1/2	3	2 1/2	1	2 1/2	1 1/2	2 1/2	1	3	2 1/2	2													

1-3"  
1-2"

3-3"

\*\* ALL PEDESTRIAN PUSH BUTTONS REQUIRE A DEDICATED NEUTRAL TO CONTROLLER CABINET.

DESIGN	BY ED OLSEN/KIM GARL
DRAWING	BY L.LEUNG/M. FAJARDO
CHECKED	BY JOHN MCCARTHY

REGISTERED TRAFFIC ENGINEER  
2/23/16  
PLANS APPROVAL DATE

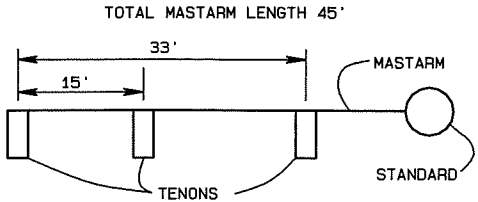


"AS BUILT" INFORMATION TO BE COMPLETED AFTER CONSTRUCTION		DATE	REVISION	BY	APPROVED	CONDUCTOR & EQUIPMENT SCHEDULES					COUNTY OF SONOMA DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS SUSAN R. KLASSEN, P.E., DIRECTOR	
CONSTRUCTION COMPLETED:		2/2016	ADDENDUM 1	KG	JRM	ROAD NUMBER	BUDGET NUMBER	FISCAL YEAR	SHEET NUMBER	TOTAL SHEETS	PROJECT: ADOBE ROAD AT EAST WASHINGTON STREET	
RESIDENT ENGINEER						5602	C02279	2015-16	23	48	DATE: JANUARY 2016	
AS BUILT DRAWINGS BY:						5707					SCALE: 1" = 20'	

POLE AND EQUIPMENT SCHEDULE										
LOC.	STANDARD			VEH. SIG. MTG.		PED.SIGNAL	PPB		"LED"	SPECIAL REQUIREMENTS
	TYPE	SIG. M.A.	LUM. M.A.	MAST ARM	POLE	MTG.	Ø	ARROW	LUMINAIRE	
(A)	26-4-100*	45'	15'	(MODIFIED) MAS MAS MAS	—	SP-1-T	—	—	"LED" 179w EQUIVALENT TO 250 HPS (TYPE III)	THIRD MASTARM TENON REQUIRED SEE DETAIL BELOW INSTALL PEU ON TOP OF STANDARD SEE DETAIL ES-7N. R3-4 SIGNAL MASTARM SIGN REQUIRED. SIGNAL MASTARM STREET NAME SIGN REQUIRED SEE NOTES 2, 3 AND 5 BELOW. SIGN SHALL READ "E. WASHINGTON ST."
(B)	TYPE 15TS*	—	15'	—	SV-2-TA	—	—	—	"LED" 179w EQUIVALENT TO 250 HPS (TYPE III)	
(C)	PEDESTRIAN PUSH BUTTON POST	—	—	—	—	—	6	→	—	
(D)	1 - 8	—	—	—	TV-1-T	SP-1-T	6	←	—	
(E)	TYPE 15TS*	—	15'	—	SV-2-TA	SP-1-T	8	→	"LED" 179w EQUIVALENT TO 250 HPS (TYPE III)	
(F)	PEDESTRIAN PUSH BUTTON POST	—	—	—	—	—	8	←	—	
(G)	26-4-100*	40'	15'	(MODIFIED) MAS MAS MAS	SV-1-T	SP-1-T	—	—	"LED" 179w EQUIVALENT TO 250 HPS (TYPE III)	THIRD MASTARM TENON REQUIRED SEE DETAIL BELOW R3-4 SIGNAL MASTARM SIGN REQUIRED. SIGNAL MASTARM STREET NAME SIGN REQUIRED SEE NOTES 2, 3 AND 5 BELOW. SIGN SHALL READ "E. WASHINGTON ST."
(H)	(MODIFIED) 26-4-100*	45'	(MODIFIED) 15'	MAS-4C	SV-3-TB	—	—	—	"LED" 179w EQUIVALENT TO 250 HPS (TYPE III)	R3-4 SIGNAL MASTARM SIGN REQUIRED SIGNAL MASTARM STREET NAME SIGN REQUIRED ES-7N.SEE NOTES 2, 3 AND 5 BELOW. LUMINAIRE ARM MODIFIED SEE NOTE 4 BELOW. SIGN SHALL READ "ADOBE RD"

OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGENDS, SPECIAL PROVISIONS, STANDARD PLANS AND STANDARD SPECIFICATIONS, FOR TYPE OF STANDARD.  
VEHICLE AND PEDESTRIAN SIGNAL MOUNTINGS, SEE 2006 CALTRANS STANDARD PLANS.

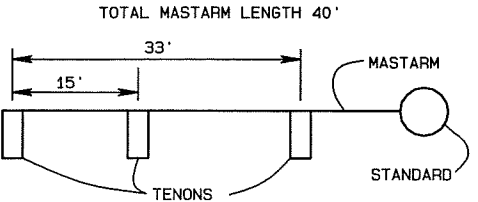
\* ALL POLES A - H IN STOCK: TO BE PICKED UP AT SONOMA COUNTY CORP. YARD. SEE NOTE 4 BELOW.



THREE (3) MASTARM PIPE TENONS WILL BE REQUIRED

SPECIAL MASTARM TENON DETAIL FOR POLE (A)

NOT TO SCALE



THREE (3) MASTARM PIPE TENONS WILL BE REQUIRED

SPECIAL MASTARM TENON DETAIL FOR POLE (G)

NOT TO SCALE

POLE AND EQUIPMENT SCHEDULE NOTES

- ALL VEHICLE TRAFFIC SIGNAL HEADS SHALL BE 12". ALL PEDESTRIAN INDICATIONS, VEHICLE SIGNALS AND STREET LIGHTING SHALL HAVE "LED" LIGHTING. SEE SPECIAL PROVISIONS FOR DETAILS.
- ALL R3-4 SIGNAL MASTARM SIGNS AND BRACKETS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. SEE SIGNING PLANS AND QUANTITY SUMMARY FOR FURTHER DETAILS.
- SIGNAL MASTARM STREET NAME SIGNS AND BRACKETS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR. SEE SIGNING PLANS AND QUANTITY SUMMARY FOR NOTES AND MOUNTING DETAILS.
- POLES, SIGNAL MAST ARMS, LUMINAIRE ARMS, AND ANCHOR BOLTS ARE LOCATED AT THE SONOMA COUNTY PUBLIC WORKS CORPORATION YARD. EQUIPMENT TO BE PICKED UP BY CONTRACTOR AT 2175 AIRPORT BLVD. SANTA ROSA, CA. PLEASE PROVIDE 24 HOUR NOTICE.
- STREET NAME SIGNS AND HARDWARE TO BE PROVIDED BY CONTRACTOR.

ADDENDUM NO. 1